

What is claimed is:

1 1. A method for real-time data scheduling for displaying real-time data
2 using a server, the server collecting a plurality of data, assorting the data into a
3 plurality of channel-data, giving a queue number and a timer on each
4 channel-data, the client having a user interface, a plurality of queues, a plurality
5 of channel receiving unit and a channel-data switching unit, the method for
6 real-time data scheduling comprising:

- 7 a. making a channel request to the server from the channel unit;
- 8 b. receiving the channel request in the server and transferring the
9 corresponding channel-data to the channel receiving unit;
- 10 c. receiving the channel-data in the channel unit, defining the time to enter
11 into a plurality of queues according to the timer of the channel-data, and
12 defining the order of the channel-data in the corresponding queue
13 according to the queue number of the channel-data; and
- 14 d. retrieving the channel-data in the channel-data switching unit in the
15 queues, displaying the data by the user interface unit and repeating
16 step (a).

1 2. The method for real-time data scheduling of claim 1, wherein the
2 queue number defines the priority of the data display.

1 3. The method for real-time data scheduling of claim 2, wherein the
2 channel-data with higher priority of the data display is displayed prior than the
3 channel-data with lower priority of the data display.

1 4. The method for real-time data scheduling of claim 2, wherein when the
2 channel-data with higher priority of the data display cut in the queue, the
3 channel-data with higher priority of the data display is displayed prior than the
4 channel-data with lower priority of the data display.

1 5. The method for real-time data scheduling of claim 1, wherein the
2 channel-data display in the queue follows the FIFO (first in first out) rule.

1 6. The method for real-time data scheduling of claim 1, wherein when the

channel-data in a plurality of queues is empty, pre-determined data with timer defining the display time of a later period is displayed simultaneously.

7. The method for real-time data scheduling of claim 6, wherein the pre-determined data is an advertisement.

8. The method for real-time data scheduling of claim 1, wherein the server provides the user interface.

9. The method for real-time data scheduling of claim 1, wherein the channel-data is dependent upon client request of including a selected plurality of channel units.

10. A method for real-time data scheduling for displaying real-time data using a server, the server collecting a plurality of data, assorting the data into a plurality of channel-data, giving a priority number and a timer on each channel-data, the client having a user interface, a plurality of queues, a plurality of channel receiving unit and a channel-data switching unit, the method for real-time data scheduling comprising:

- a. making a corresponding channel request to the server from the channel unit;
- b. receiving the channel request in the server and transferring the corresponding channel-data to the channel receiving unit;
- c. receiving the channel-data in the channel unit, determining whether the client generates a corresponding queue according to the priority number of the channel-data, if yes defining the time to enter into the queue according to the timer and the priority number of the channel-data, if not, generating the corresponding queue according to the timer and the priority number of the channel-data as the reference so as to define the time for the channel-data to enter into the queue; and
- d. retrieving the channel-data in the channel-data switching unit in the queues, displaying the data by the user interface unit and repeating step (a).

11. The method for real-time data scheduling of claim 10, wherein the

queue number defines the priority of the data display.

12. The method for real-time data scheduling of claim 11, wherein the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

13. The method for real-time data scheduling of claim 11, wherein when the channel-data with higher priority of the data display cuts in the queue, the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

14. The method for real-time data scheduling of claim 10, wherein the channel-data display in the queue follows the FIFO (first in first out) rule.

15. The method for real-time data scheduling of claim 10, wherein when the channel-data in a plurality of queues is empty, pre-determined data with timer defining the display time of a later period is displayed simultaneously.

16. The method for real-time data scheduling of claim 15, wherein the pre-determined data is an advertisement.

17. The method for real-time data scheduling of claim 10, wherein the server provides the user interface.

18. The method for real-time data scheduling of claim 20, wherein the channel-data is dependent upon client request of including a selected plurality of channel units.

19. A system for real-time data scheduling comprising:
a server used for receiving a channel request and providing a corresponding channel-data, wherein the channel-data further comprising a timer and a queue number ; and
a client having a user interface unit, a plurality of queues and a plurality of channel units;
wherein, the channel unit sends a channel request, receives corresponding channel-data, defines the time to enter into a plurality of queues according to the timer of the channel-data, and defining the order of the channel-data in the corresponding queue

according to the queue number of the channel-data.

20. The system for real-time data scheduling of claim 19, wherein the queue number defines the priority of the data display.

21. The system for real-time data scheduling of claim 20, wherein the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

22. The system for real-time data scheduling of claim 20, wherein when the channel-data with higher priority of the data display cuts in the queue, the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

23. The system for real-time data scheduling of claim 19, wherein the channel-data display in the queue follows the FIFO (first in first out) rule.

24. The system for real-time data scheduling of claim 19, wherein when the channel-data in a plurality of queues is empty, pre-determined data with timer defining the display time of a later period is displayed simultaneously.

25. The system for real-time data scheduling of claim 24, wherein the pre-determined data is an advertisement.

26. The system for real-time data scheduling of claim 19, wherein the server provides the user interface.

27. The system for real-time data scheduling of claim 19, wherein the channel-data is dependent upon client request of including a selected plurality of channel units.

28. A system for real-time data scheduling comprising:
a server used for receiving a channel request and providing a corresponding channel-data, wherein the channel-data further comprising a timer and a timer and a priority number; and
a client having a user interface unit and a plurality of channel units;
wherein, the channel unit sends a channel request, receives the corresponding channel-data, determines whether the client

generates a corresponding queue according to the priority number of the channel-data, if yes, defines the time to enter into the queue according to the timer and the priority number of the channel-data, if not, generates the corresponding queue according to the timer and the priority number of the channel-data as the reference so as to define the time for the channel-data to enter into the queue.

29. The system for real-time data scheduling of claim 28, wherein the queue number defines the priority of the data display.

30. The system for real-time data scheduling of claim 29, wherein the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

31. The system for real-time data scheduling of claim 29, wherein when the channel-data with higher priority of the data display cuts in the queue, the channel-data with higher priority of the data display is displayed prior than the channel-data with lower priority of the data display.

32. The system for real-time data scheduling of claim 28, wherein the channel-data display in the queue follows the FIFO (first in first out) rule.

33. The system for real-time data scheduling of claim 28, wherein when the channel-data in a plurality of queues is empty, pre-determined data with timer defining the display time of a later period is displayed simultaneously.

34. The system for real-time data scheduling of claim 33, wherein the pre-determined data is an advertisement.

35. The system for real-time data scheduling of claim 28, wherein the server provides the user interface.

36. The system for real-time data scheduling of claim 28, wherein the channel-data is dependent upon client request of including a selected plurality of channel units.